# HEWLETT-PACKARD COMPANY Intellectual Property Administration P. O. Box 272400 Fort Collins, Colorado 80527-2400

Rev 10/03

#### PATENT APPLICATION

ATTORNEY DOCKET NO. 200400352-1

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):	Parthasarathy Ranganathan et al.	Confirmation No.: TBD
Application No	: TBD	Examiner: TBD
Filing Date:	Herewith	Group Art Unit: TBD
Title:	OPTIMIZING LIFETIME OF A DIS	PLAY
Commissioner PO Box 1450 Alexandria, VA	A 22313-1450	LOSURE STATEMENT
Sir:		
	ation Disclosure Statement is subm	itted:
(W	der 37 CFR 1.97(b), or ithin three months of filing national applications date of first office action on the merits;	ion; or date of entry of national application; or before whichever occurs last)
` ( )	der 37 CFR 1.97 (c) together with 6 Statement under 37 CFR 1.97(e), a \$180.00 fee under 37 CFR 1.17 (After the CFR 1.97 (b) time period, but b	or
` ( )	der 37 CFR 1.97 (d) together with a Statement under 37 CFR 1.97(e)( a \$180.00 fee set forth in 37 CFF (Filed after final action, a notice of allowar	1) or (2), and 3.1.17(p).
pendency of the		the sum of \$0.00 . At any time during the fees required or credit any overpayment to Deposit
any required co applicant(s) bel	opies of patents, publications or oti	449 - Information Disclosure Statement together with her information of which applicant(s) are aware, which nination of this application and for which there may be 3.
and other fore individuals(s) d attached sheet foreign patent report or action	eign language information listed o lesignated in 37 CFR 1.56 (c) mo i, or where a foreign language pa office in a counterpart foreign ap	oreign language patents, foreign language publications in PTO Form 1449, as presently understood by the st knowledgeable about the content is given on the tent is cited in a search report or other action by a polication, an English language version of the search wance found by the foreign office is listed on form PTO
It is requested	that the information disclosed herei	n be made of record in this application.
	that this correspondence is being the United States Postal Service	Respectfully submitted,
as first class ma Commissioner fo	ail in an envelope addressed to: or Patents, Alexandria, VA Date of Deposit: OR	Parthasarathy Ranganathan et al.
transmitted to th	that this paper is being ne Patent and Trademark Office	Ashok K. Mannava
facsimile numbe Number of page	r on	Attorney/Agent for Applicant(s)
Typed Name:		Reg. No. 45,301
Signature:		Date: <b>April 23, 2004</b>
(IDSCERT)		Telephone No.: (703) 628-1461

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1/	A 2003/0135288	July 17, 2003	Rar	nganathan et al.				
11	3 2003/0156074	Aug. 21,2003	Rar	nganathan et al.				
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	1Q	eTForecasts, "\	Vorldwide PDA & \$	Smartp	phone Forecast 1998	8-2008	3", June 2003.		
	1R	Flinn, J. et al.,	"Energy-Aware Ad	aptatio	on for Mobile Applica	ation",	, 1999.		
	15	Geelhoed, E. et Battery Lifetime the Internet on	es in Mobile Device	e User	Interfaces and Ener oceedings of HP Tec	rgy-Ad chCon,	aptive Displays: I June 2004; Dow	mproving nloaded from	
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10	<u></u>	al., "Energy Trade-(		ertinent Pages, etc.)  Computer", IBM Research Divisio	n,			
10 1P	Kamijoh, N. et October 2001.	al., "Energy Trade-( Abstract.	Offs in the IBM Wristwatch	<u></u>				
10 1P	Coctober 2001.  Region Pering, T. et al. ISBN August 20	al., "Energy Trade-(Abstract.  The Simulation a	Offs in the IBM Wristwatch	Computer", IBM Research Divisio				

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1R	Viredaz, M. et a	al., "Energy Manaç	gement	on Hanheld Devices	s", ACM Press, 200	93.		
			tion of	a Handhold Comput	er", IEEE Micro, 20	03.		
18	Viredaz, M. et a	al., "Power Evalua	tion or	a Handileid Comput				
1S EXAMINER	Viredaz, M. et a	al., "Power Evalua		DATE CONSIDER	PFD	-		

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